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D412-666-011
Job Sheet 198778

**Part No:** D412-666-011**Job Qty:** 2 pcs**Part Name:** Gross Weight Towing Adapter**Part Weight:** 0 lbs**Status:** New**Priority:** Medium**Job Created:** 8/6/19**Job Tracking No:****Due Date:** 10/10/19**Created By:** Marie Lajeunesse**Type:** SOLD**Description:** ORDER 18460**Note:** DWG REV C1 IPP Rev:B Added GHG 002 NG 02-03-06 IPP Rev:C As per Rev C JLM 07-09-07 Verified By:EC**Ship Via:****Bill of Materials****Job Routing**

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
110	Packaging 1 - Pick Kit	2 pcs	10/10/19		0.00	0.00	Packaging 1 - 1		
							Packaging 1 - 2		
							Packaging 1 - 3		
							Packaging 1 - 4		
							Packaging 1 - 5		
							Packaging 1 - 6		
							Packaging 1 - 7		
							Packaging 1 - 8		
							Packaging 1 - 9		
							Packaging 1 - 10		
							Packaging 1 - 11		
							Packaging 1 - 12		
							Packaging 1 - 13		
							Packaging 1 - 14		
							Packaging 1 - 15		
							Packaging 1 - 16		
							Packaging 1 - 17		
							Packaging 1 - 18		
							Packaging 1 - 19		
							Packaging 1 - 20		
							Packaging 1 - 21		
							Packaging 1 - 22		
							Packaging 1 - 23		
							Packaging 1 - 24		
							Packaging 1 - 25		
							Packaging 1 - 26		
							Packaging 1 - 27		
							Packaging 1 - 28		
							Packaging 1 - 29		
							Packaging 1 - 30		

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**Container No:** S217976**Part:** D412-666-011**Job No:** 198778**Serial No/Batch:** S217976**Revision:****Inspector:****Exp Date:****Instructions:** TC STC SH96-88 Issue 2, FAA-STC SR005631

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					Packaging 1 - 31	
					Packaging 1 - 32	
					Packaging 1 - 33	
					Packaging 1 - 34	
					Packaging 1 - 35	
					Packaging 1 - 36	
120	QC 4	2 pcs	10/10/19	0.00 0.00	QC 4 - 28	
					QC 4 - 58	
					QC 4 - 69	
					QC 4 - 9	
					QC 4 - 46	
					QC 4 - 68	
					QC 4 - 72	
					QC 4 - 74	
					QC 4 - 75	
130	Packaging 3-1 - Stock - B4B	2 pcs	10/10/19	0.00 0.00	Packaging 3 - 1 - B4B	
					Packaging 3 - 2 - B4B	
					Packaging 3 - 3 - B4B	
					Packaging 3 - 4 - B4B	
					Packaging 3 - 5 - B4B	
					Packaging 3 - 6 - B4B	
					Packaging 3 - 7 - B4B	
					Packaging 3 - 8 - B4B	
					Packaging 3 - 9 - B4B	
					Packaging 3 - 10 - B4B	
					Packaging 3 - 11 - B4B	
					Packaging 3 - 12 - B4B	
					Packaging 3 - 13 - B4B	
					Packaging 3 - 14 - B4B	
					Packaging 3 - 15 - B4B	
					Packaging 3 - 16 - B4B	
					Packaging 3 - 17 - B4B	
					Packaging 3 - 18 - B4B	
					Packaging 3 - 19 - B4B	
					Packaging 3 - 20 - B4B	
					Packaging 3 - 21 - B4B	
					Packaging 3 - 22 - B4B	
					Packaging 3 - 23 - B4B	
					Packaging 3 - 24 - B4B	
					Packaging 3 - 25 - B4B	
					Packaging 3 - 26 - B4B	
					Packaging 3 - 27 - B4B	
					Packaging 3 - 28 - B4B	
					Packaging 3 - 29 - B4B	
					Packaging 3 - 30 - B4B	
					Packaging 3 - 31 - B4B	
					Packaging 3 - 32 - B4B	
					Packaging 3 - 33 - B4B	
					Packaging 3 - 34 - B4B	
					Packaging 3 - 35 - B4B	
					Packaging 3 - 36 - B4B	
135	DC - 1 - B4B	2 pcs	10/10/19	0.00 0.00	DC - 1 - B4B	
					DC - 2 - B4B	
140	QC 21 - FG	2 pcs	10/10/19	0.00 0.00	QC 21 - FG - 21	
					QC 21 - FG - 70	
					QC 21 - SA - 53	
Part Op 110 - (Pick Kit)						
Descriptions: 120 - (QC4- 100% Inspect kits for completeness)						
130 - (Identify as per dwg & Stock Location: _____) Identify and pack for shipping as per PPP D412-666-011 Location						

Marks

DAS
78
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Marks

DAS
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DAS
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SEP 17 2019

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SEP 27 2019

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May 13
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May 13

9/27/2019

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 SEP 17 2019
 DAS
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 SEP 27 2019

:FG023

135 - (Document Control) Photocopy bluefile & type labels per PPP412-666-011 CHG 004

140 - (QC21- Final Inspection - Work Order Release)

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
AN6-15A	Bolt	8 Ea (4 ea)	110-Packaging 1 - Pick Kit	5183433
AN6-45A	Bolt	8 Ea (4 ea)	110-Packaging 1 - Pick Kit	171137321.0x5/54 9335K?
D2888	Lug	4 pcs (2 ea)	110-Packaging 1 - Pick Kit	5216394
MS21042L6	Nut	8 Ea (4 ea)	110-Packaging 1 - Pick Kit	5143081
NAS1149D0663J	Washer	16 Ea (8 ea)	110-Packaging 1 - Pick Kit	5161525

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
110-Packaging 1 - Pick Kit	AN6-15A	8	24	0
	AN6-45A	8	30	0
	D2888	4	0	0
	MS21042L6	8	271	0
	NAS1149D0663J	16	654	0

Part Specifications

Specifications could not be found.

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Entered: _____

Date: _____

WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: _____ Part No. _____		DISPOSITION Rework ☐ ☐ ☐ Scrap ☐ ☐ ☐ Use-as-is ☐ ☐ ☐				DEPARTMENT/PROCESS Skid-tube ☐ ☐ Machining ☐ ☐ Large Fab ☐ ☐ Cross tube ☐ ☐ Small Fab ☐ ☐ Finishing ☐ ☐ Eng. (Non-AW) ☐ ☐ Prod. Eng. Coord. ☐ ☐ Rec/Store/Packaging ☐ ☐ Engineering ☐ ☐ Water Jet ☐ ☐ Supplier ☐ ☐ Quality ☐ ☐							
Date: _____		Sequence #: _____		QTY Affected: _____		MRB (QS1042)							
Description Work Order Deviation										Disposition			
Completed By													
Lead hand / Supervisor													
QC / QA Coordinator													
FAULT CATEGORY													
Root Cause													
Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Preservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐				Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Undeclared Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread ☐									
Other/Details: _____													

1.0 APPLICABILITY:

GROSS WEIGHT TOWING KIT D412-666-011 MAY BE INSTALLED ON DART D205-634-XXX OR D204-635-XXX OR D412-742-XXX SKIDTUBES INSTALLED ON 412 AIRCRAFT TO ALLOW GROUND HANDLING AT GROSS WEIGHT IN ACCORDANCE WITH BELL SERVICE INSTRUCTION BHT-412-SI-58. IT IS ALSO ACCEPTABLE TO INSTALL THIS KIT ON 204/205/210/212 AIRCRAFT EQUIPPED WITH DART SKIDTUBES IN ORDER TO PRESERVE THE LIFE OF THE AFT CROSSTUBES. THIS KIT CONTAINS ENOUGH PARTS TO INSTALL D2888 LUGS ON BOTH SKIDTUBES.

2.0 PARTS LIST:

QTY	PART	DESCRIPTION
X	D412-666-011	GROSS WEIGHT TOWING KIT
2	D2888	LUG
4	AN6-15A	BOLT
4	AN6-45A	BOLT
8	AN960JD616	WASHER
4	MS21042L6	NUT (or MS21042-6)

3.0 WEIGHT AND BALANCE:

INSTALLATION	WEIGHT	LONGITUDINAL	
		ARM	MOMENT
D412-666-011	1.90 lb 0.86 kg	163.0 in 4.14 m	310 in lb 3.56 m kg

4.0 PROCEDURE:

- 1) REMOVE AN6-12A BOLTS (4) ON INBOARD SIDE OF AFT SADDLE AND DISCARD. ON LANDING GEAR WITH DART AFT CROSSTUBES, REMOVE (4) AN6-40A BOLTS.
- 2) INSTALL D2888 LUGS WITH AN6-15A BOLTS (2) AS SHOWN IN FIGURE 1. USE AN6-45A (2) BOLTS ON DART CROSSTUBES, AS SHOWN IN FIGURE 2.
- 3) TORQUE BOLTS TO 95-110 in-lb (10.7-12.4 N-m).

5.0 NOTE:

IT IS ACCEPTABLE TO REPLACE THE AN6-15A/45A BOLTS WITH LONGER OR SHORTER AN6 BOLTS AS REQUIRED AND/OR INSTALL EXTRA AN960JD616 WASHERS UNDER NUT TO ENSURE 1.5 TO 4 THREADS IN SAFETY.

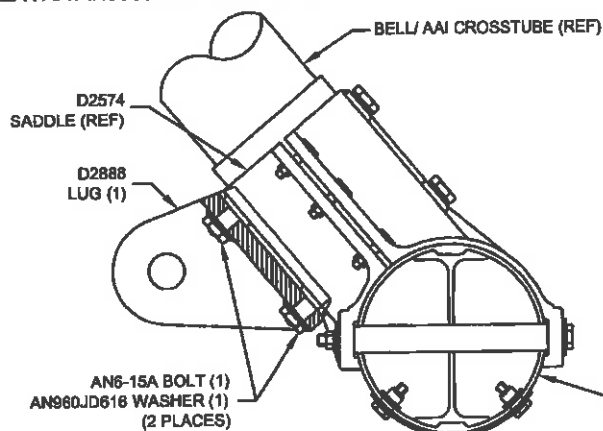


FIGURE 1
(BELL/AAI CROSSTUBES)

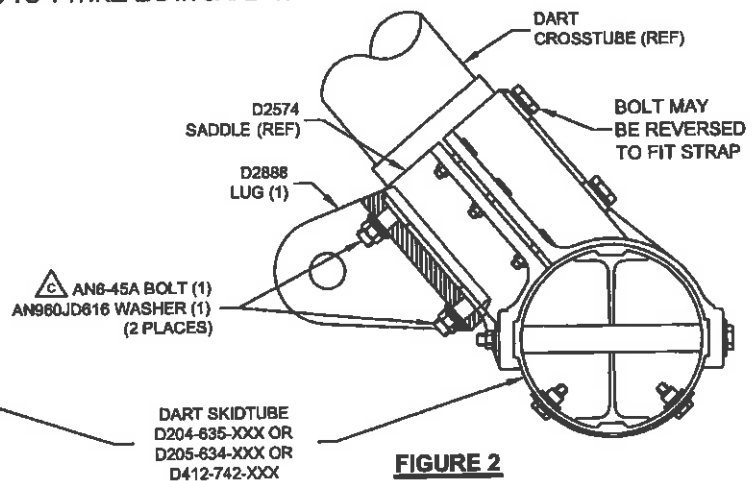


FIGURE 2
(DART CROSSTUBES)

C	- AN6-45A WAS AN6-43A, ADD NOTES - TO ENSURE COMPATIBILITY WITH D412-742-011/-013 - ESTIMATE (PARTS/PICK LIST) IS AFFECTED	MB	07.08.09
B	UPDATE KIT FOR BOTH SKIDTUBES AND COMPATIBILITY WITH DART CROSSTUBES	CP	02.03.04
A	NEW ISSUE	CP	99.05.03
REV.	DESCRIPTION	BY	DATE
DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN			
CHECKED		DRAWING NO.	REV. C
MFG. APPR.	N/A	D412-666	SHEET 1 OF 1
APPROVED		TITLE	SCALE
DE APPR.		412 GROSS WEIGHT TOWING KIT	1:4
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